CLAIMS

What is claimed is:

- 1 A network comprising:
- 2 a first node, having a point code and a switching element to selectively couple the
- 3 node to other nodes through one or more communication channels; and
- 4 a second node, having a point code and a switching element to establish a first
 - communication channel with the first node, the second node to identify the first
- 6 communication channel with an identifier that includes, at least, the point code associated
- 7 with the first node and the point code associated with the second node.
- 1 2. The network of claim 1, wherein the first node and the second node further comprise
- 2 a network identifier to identify the network.
- 1 3. The network of claim 2, wherein the second node is to identify the communication
- 2 channel with the identifier that further includes the network identifier.
- 1 4. The network of claim 2, wherein the wherein the second node further comprises a
- 2 second point code.
- 1 5. The network of claim 4, wherein the second node establishes a second
- 2 communication channel with the first node, identified by a second identifier that includes the
- 3 point code associated with the first node and the second point code associated with the
- 4 second node.

Attorney Docket No.: 042390.P13682

14

- 1 6. The network of claim 5, wherein the second identifier further includes the network
- 2 identifier.
- 1 7. The network of claim 6, wherein the second node has a second network identifier to
- 2 identify a second network, and establishes a third communication channel identified by an
- 3 identifier that includes one of the two point codes associated with the second node and the
- 4 second network identifier.
- 1 8. The network of claim 7, wherein the second node implements Common Channel
- 2 Signaling System No. 7 (SS7) protocols to manage one or more of the first, second, or third
- 3 communication channels.
- 1 9. The network of claim 8, wherein an Integrated Services Digital Network User Part
- 2 (ISUP) layer residing on the second node creates the second and third identifiers to identify
- 3 the second and third communication channels.
- 1 10. A node comprising:
- 2 a switching element to selectively couple the node to a communication channel with
- 3 another node; and
- a communication channel identifier agent (CCIA) coupled to the switching element to
- 5 identify the communication channel, the CCIA to include one or more originating point
- 6 codes (OPCs), the one or more OPCs to identify the node, and one or more destination point
- 7 codes (DPCs), the one or more DPCs to identify one or more remote nodes, the CCIA to use
- 8 at least one of the one or more OPCs and one of the one or more DPCs to identify the
- 9 communication channel.

- 1 11. The node of claim 10 wherein the CCIA creates an interface identifier (IntfID), the
- 2 IntfID including, at least, one of the one or more OPCs and one of the one or more DPCs.
- 1 12. The node of claim 11 wherein the IntfID further includes a network identifier, the
- 2 network identifier to identify a network to which the switching element is to connect.
- 1 13. The node of claim 12 wherein the CCIA is to identify a communication channel from
- 2 the node to another node, with an identifier that is a combination of the IntfID and a circuit
- 3 identification code (CIC).
 - 14. A method comprising:
- 2 creating a first interface identifier, the first interface identifier including at least a first
- 3 originating point code (OPC) designating a first node and a destination point code (DPC)
- 4 designating a second node; and
- 5 combining the first interface identifier with a circuit identification code (CIC) to
- 6 identify a communication channel between the first node the second node.
- 1 15. The method of claim 14 further comprising:
- 2 creating a second interface identifier, the second interface identifier including at least
- a second OPC designating the first node and the DPC designating the second node; and
- 4 combining the second interface identifier with the CIC to identify a second
- 5 communication channel between the first node and the second node.
- 1 16. The method of claim 14 wherein the first interface identifier further includes a first

16

2 network identifier to identify a network containing the first node.

Attorney Docket No.: 042390.P13682

Express Mail No .:

- 1 17. The method of claim 16 wherein the first node implements the Common Channel
- 2 Signaling System No. 7 (SS7) protocols to manage the first communication channel and the
- 3 second communication channel.
- 1 18. The method of claim 16 further comprising:
- 2 creating a third interface identifier, the third interface identifier including at least one
- 3 of the two originating point codes (OPCs) designating the first node, a second destination
- 4 point code (DPC) designating a third node, and a second network identifier to identify a
- 5 network containing the third node; and
- 6 combining the third interface identifier with the CIC to identify a third
- 7 communication channel between the first node and the third node.
- 1 19. The method of claim 18 wherein the first node implements the SS7 protocols to
- 2 manage the third communication channel.
- 1 20. A method comprising:
- 2 receiving an originating point code (OPC) to identify a node;
- 3 receiving a destination point code (DPC) to identify another node; and
- 4 generating an interface identifier, the interface identifier including at least the OPC
- 5 and the DPC.
- 1 21. The method of claim 20 further comprising:
- 2 receiving a circuit identification code (CIC); and
- 3 employing the interface identifier and the CIC to identify a communication channel

4 between the node and the another node.

- 1 22. The method of claim 21 further comprising:
- 2 receiving a second OPC, the second OPC to alternatively identify the node; and
- generating a second interface identifier, the second interface identifier including at
- 4 least the second OPC and the DPC.
- 1 23. The method of claim 22 further comprising employing the second interface identifier
- 2 and the CIC to identify a second communication channel between the node and the another
- 3 node.
- 1 24. The method of claim 21 further comprising:
- receiving a first network identifier to identify a first network and a second network
- 3 identifier to identify a second network;
- 4 generating a second interface identifier, the second interface identifier including at
- 5 least the OPC, DPC, and second network identifier; and
- 6 employing the second interface identifier and the CIC to identify a communication
- 7 channel between the node and a node in the second network.
- 1 25. The method of claim 24 wherein the node is implementing the Common Channel
- 2 Signaling System No. 7 (SS7) protocols to manage the communication channels.
- 1 26. The method of claim 25 wherein an Integrated Services Digital Network User Part
- 2 (ISUP) layer residing on the node employs the second interface identifier and the CIC to
- 3 identify the communication channel between the node and the node in the second network.
- 1 27. An article of manufacture comprising:

2		an electronically accessible medium providing instructions, that when executed by
3	one or more processors, cause the one or more processors to	
4		receive an originating point code (OPC) to identify a node;
5		receive a destination point code (DPC) to identify another node; and
6		generate an interface identifier, the interface identifier including at least the OPC and
7	the DPC.	
1	28.	The article of manufacture of claim 27, wherein the electronically accessible medium
2	providing instructions, that when executed by one or more processors cause the one or more	
3	processors to	
4		receive a circuit identification code (CIC); and
5		employ the interface identifier and the CIC to identify a communication channel
6	between the node and the another node.	
1	29.	The article of manufacture of claim 28, wherein the electronically accessible medium
2	providing instructions, that when executed by one or more processors cause the one or more	
3	processors to	
4		receive a second OPC, the second OPC to alternatively identify the node; and
5		generate a second interface identifier, the second interface identifier including at least
6	the second OPC and the DPC.	
1	30.	The article of manufacture of claim 28, wherein the electronically accessible medium
2	provi	ding instructions, that when executed by one or more processors cause the one or more
3	processors to	
1		receive a first network identifier to identify a first network and a second network

identifier to identify a second network;

1.7

- 6 make a second interface identifier, the second interface identifier including at least
- 7 the OPC, DPC, and second network identifier; and
- 8 employ the second interface identifier and the CIC to identify a communication
- 9 channel between the node and a node in the second network.

20